UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,116	12/29/2000	Katsumi Maeda	NEC99P156-ms	6329

7590 11/29/2001

McGinn & Gibb, PLLC
Suite 200
8321 Old Courthouse Road
Vienna, VA 22182-3817

EXAMINER
ASHTON, ROSEMARY E

ART UNIT	PAPER NUMBER
1752	3

DATE MAILED: 11/29/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/750,116	MAEDA ET AL.	
	Examiner	Art Unit	
	Rosemary E. Ashton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-19 and 21-23* is/are rejected.

7)☒ Claim(s) *6,7 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Double Patenting

1. Claims 1-5,14,18,19 are directed to the same invention as that of claims 1-4,6-8,15,16,20 of commonly assigned U.S. patent no. 6,280,898. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 1-5,14,18,19 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4,6-8,15,16,20 of prior U.S. Patent No. 6,280,898. This is a double patenting rejection.

The lactone monomer compound of claims 1,2 and 20 of Patent No. 6,280,898 is the same compound as in applicant's claim 1 when R1,R2,R3 and R4 are hydrogen atoms and X is CH_2 in the patent and R1 and R2 are hydrogen atoms in the application. The monomer have the above functional groups is polymerized with another monomer as in claims 3 and 4 of the patent and claims 3 and 14 of the application. In the polymer of formula 2 in claim 3 of the application the monomer unit defined by y may be 0 and thus a copolymer of monomer x and monomer z is formed. The copolymer is the same as the copolymer in claim 6 of the patent when "the polymer of claim 3 further comprising units of at least one of the following formulae" and the formula is (2a). This is the same polymer as in claim 14. When the monomer (2a) having R1,R2 and R6 as hydrogen atoms it is the same monomer as monomer unit z in claim 3 of the application when R5 and R6 are hydrogen atoms. The polymer of claims 2,3 and 14 of the application is used in a photoresist composition comprising a photoacid generator as in claims 4,5,18 and 19.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-5,10-13,14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Patent No. 6,280,898 cited above.

As shown in the double patenting rejection above the patent teaches applicant's invention with respect to claims 1-5 and 14. Claims 15-19 are also rejected under 35 USC 102(e) because the monomer of claim 1 of the patent reads on the broad formula (4) in claim 15 when R8 a hydrogen atom and R9 is a 7 carbon alicyclic norbornyl group having an alicyclic lactone structure which is polymerized and the polymer is used in a photoresist composition comprising a photoacid generator as in claims 18 and 19. The photoresist composition comprises a solvent as taught in col. 15, lines 41-50. As shown in col. 57, lines 45-50 the photoresist compositions are applied to a substrate, exposed to 193 nm with an ArF laser, heated and developed as in claims 10-12.

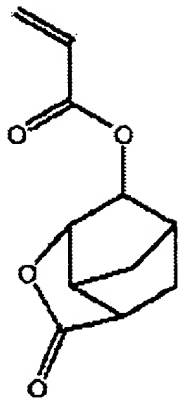
Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 8,9,21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 6,280,898 cited above.

As shown above Patent No. 6,280,898 teaches the monomer below which anticipates applicant's monomer, polymer and photoresist composition. As to claims 22 and 23 the photoresist compositions are applied to a substrate, exposed to 193 nm with an ArF laser, heated and developed as in claims 10-12 (col. 57, lines 45-50).



The patent does not teach the amount of reagents as claimed, however, it would have been obvious to one of ordinary skill in the art to vary the amount of reagents in the composition through routine experimentation so as to obtain a photoresist composition for pattern formation because optimization of reagent concentrations is well known in the art. As stated in section 2144.05(b) of the MPEP:

"Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller , 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955).

Allowable Subject Matter

8. Claims 6,7,20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. .The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not teach the photoresist material has a polyhydric alcohol.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosemary E. Ashton whose telephone number is 308-2057. The examiner can normally be reached on 8 hour days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

Rosemary E. Ashton
Primary Examiner
Art Unit 1752

rea
November 19, 2001

ROSEMARY ASHTON
PRIMARY EXAMINER